

### *Fundamental Truths Discovered.*

For ten or twelve years the early settlers struggled along with the many difficulties that beset pioneer life, but their greatest hindrance was their inexperience. Time, however, brought about wonderful changes, and eventually in Saskatchewan there was developed a class of practical and successful farmers who cannot be surpassed anywhere. They were trained in the hard school of experience and by intelligent observation of cause and effect.

It was noticed that when summerfallows were ploughed early and all vegetation kept down by surface tillage during the summer, the soil's capacity to store up moisture for succeeding crops was wonderfully increased. It was also noted that where subsequent packing occurred, either accidentally or otherwise, crops not only grew better but matured earlier. The results of these observations when put into practice convinced the farmers of the necessity of adopting a system of summerfallowing every third or fourth year, and while this system is practised for several purposes, its primary object is the conservation of soil moisture.

New settlers, on arriving in Saskatchewan, are very difficult to convince that summerfallowing is necessary for this or any other purpose, while the land is in a state of virginity. The term "summerfallow" usually suggests depleted soil fertility and the necessity for restoring it by such means as are available; but in Saskatchewan the primary object of summerfallowing is, as I have already intimated, to store up moisture to act as a reserve supply to be given off to succeeding crops. To summerfallow according to some of the old methods employed in many localities while the country was in its primitive state had very little effect in carrying out the main object in view. The usual custom was to let the intended fallow lie idle until about the first of July, at which time the weeds were waving in the wind and sometimes half way up the horses' sides, when a plough and chain were employed to turn this luxuriant crop of vegetation under. However this system, which neither encouraged the germination of weed seeds nor conserved moisture, but rather dissipated it, was soon abandoned in favour of the more enlightened methods of early ploughing, immediately after seeding, and frequent subsequent tillage, not only for the purpose of killing weeds, but also in keeping the soil in a proper condition to receive and retain the rainfall.

### *The Method of Summerfallowing.*

Of course no one method in all its detail is practised by our farmers in the various districts, for conditions differ even in this prairie country; but the proper method and the one practised by the most successful farmers in the older districts, is to give the intended summerfallow some form of shallow tillage during the previous fall, with disc, gang plow or cultivator, so that the soil will not only be in a proper condition to receive the melting spring snows, but also be in a state that will favour the rapid germination of a large percentage of weed seeds in the following spring. Immediately after seeding, this fallow land is then carefully ploughed, the depth to be determined by the character of the